
KH.GZW Light Ultraviolet Radiation Sensor

Introduction & Communication Protocol



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I Technical Specifications

- Power supply: DC12V
- Working environment: -40~85℃
- Communication interface: RS485

Working current: 20mA@DC12V

- Minimum data interval: 0.5S
- Shell material: high molecular engineering plastic

II Parameters

Parameter	Measuring Range	Resolution	Accuracy
Beam	0~157286Lux	1 Lux	< ±3%
Global Radiation	0~1242W/m ²	1W/m ²	< ±3%
Ultraviolet Light	0~262144mW/m ²	1mW/m ²	< ±3%

III Initial Configuration

Sensor address: CC

BPS: 9600

Data bits: 8

Stop position: 1

Check digit: None

CRC16: The low byte is in front and the high byte is behind

IV Communication Example

03 Command, read the light

Send: CC 03 00 03 00 02 24 16

Response: CC 03 04 00 00 00 33 CRC

Data analysis: 0X33 =51, light = 51 Lux

Instruction 03 reads the total radiation

To: CC 03 00 05 00 01 84 16

Response: CC 03 02 00 33 CRC

Data analysis: 0X33 =51, total radiation = 51w/m²

03 command, read ultraviolet radiation

To: CC 03 00 06 00 01 74 16

Response: CC 03 02 00 33 CRC

Data analysis: 0X33 =51, ultraviolet radiation = 51mw/m²

06 instruction, change the sensor address to 102 (hexadecimal 66)

To: CC 06 00 00 00 66 19 FD

Received: CC 06 00 00 00 66 19 FD

V Modbus Register Description

Register Address (hexadecimal)	Parameter	Operate	Data Format	Remarks
0x00	Address	Read and Write	Uint16	Sensor address, range 0x01-0xFF, factory setting of 204 (0xCC)
0x01	Baud Rate	Read and Write	Uint16	Baud rate : 0x02, 300; 0x03, 600; 0x04, 1200; 0x05, 2400; 0x06, 4800; 0x07, 9600; 0x08, 14400; 0x09, 19200; 0x0A, 38400; 0x0B, 56000; 0x0C, 57600; 0x0D, 115200;
0x02	Continue	Continue	Continue	Continue
0x03	Light is high	Readable	Uint16	Unit: Lux
0x04	Light is low	Readable	Uint16	Unit: Lux
0x05	Global Radiation	Readable	Uint16	Unit: w/m ²
0x06	Ultraviolet Light	Readable	Uint16	Unit: mw/m ²

Contact Us

Should you have any questions or require technical support, please do not hesitate to contact us.



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